THE SCOPE

FEBRUARY

1936

THE SCOPE

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Massachusetts School of Optometry
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Dr. August A. Klein, M. D.

1846 - 1936

Dr. August A. Klein, M. D., physician and surgeon, founder and dean emeritus of the Massachusetts School of Optometry died at his home in Roxbury, Massachusetts, February 20th.

Dr. Klein was born in Germany in 1846 and arrived in America, at a very early age, where he received his preliminary education. In 1882 he was graduated from the Boston University School of Medicine, and after an internship at the Homeopathic Hospital, in Boston, he sailed abroad for the purpose of studying ophthalmology in Jena, Germany. Distinguishing himself while there, he was appointed assistant in the eye clinic under Professor Kuhnt where he developed much of his operative skill.

On his return to this country he entered into the active practice of ophthalmology, devoting himself to his chosen specialty with great zeal; and greatly benefiting humanity thereby.

In 1895 he founded the Klein School of Optics. Being a pioneer in the study of Optometry, he exerted a tremendous influence on scores of men and women, and labored tirelessly to advance this new branch of science. During the past half dozen years, he has had to relinquish his teachings and practice due to infirmities which have kept him closely confined to his home. Besides his widow, Mrs. Clara Belle Klein, he is survived by two sons, Dr. Herman L. Klein, Dr. Theodore F. Klein, and a daughter, Dr. Wilhelmina A. Svendsen.

Dr. August Klein was known throughout Massachusetts for his comprehensive knowledge, his grasp of problems pertaining to ophthalmology and optometry, and his exceptional ability in their solution. Dean, teacher, and physician, by the depth of his friendship and his kindly appreciation of, and attitude toward humanity, he endeared himself to all who knew him.

THE SCOPE

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Editorial

There is a disposition, especially on the part of young people, to be restless. A year seems like an age, a decade appears to be a century. The "get thru" quick mania seems to have seized them, and they seem to think that success can be immediately achieved. In the educational field this is especially apparent. Some would eliminate everything which they think does not at once assist directly in the calling they would follow.

One hears many stories circulated about institutions of learning, but for true facts these "tall tales" should be investigated before given much thought. To be sure one may finish his schooling by cheating, if he is clever enough, or by bluffing, which is sort of first cousin to cheating; but you will never get an education that way.

All through life the man who does thorough work is at a premium. Suppose a person wishes his eyes examined, what sort of an optometrist does he choose? Why he consults the most careful examiner of eyes he can find. If there is to be a surgical operation of a serious sort performed, what sort of a surgeon is consulted? The surgeon who has the reputation for being altogether painstaking. Any clear thinking man knows he gets what he pays for.

Young men sometimes think that anything will do. They congratulate themselves if they can "get by", but such standards are

simply laying weak foundations for the future.

We do as older men what we got into the habit of doing as young men. If you lack thoroughness, then you lack the qualifications for bearing responsibility. Train yourself at all times to meet emergencies; in life they will spring up, just where you are not expecting them.

Learn to do things in a whole-hearted way, or not at all. When you undertake something great or small, put all your energy behind it. Energy is the steam that keeps the mechanism of our mind and body working.

At Annapolis there is a time-honored motto: "DON'T GIVE UP THE SHIP." Young men of today would do well to study the words carefully, learn their true meaning, and apply them to their own ship of state. Create for yourself a code of ethics, and learn to live religiously by it. To be successful in business or profession one must follow certain standards. If you honestly feel your chosen work is the type you are best adapted for, stay with it and use every force to see it through.

Don't use the financial backing of parents and friends to idle away precious hours that never return. Utilize every available hour for self-improvement. Read good books, listen to sound advice, intelligent conversation, and last but not least, don't do things that will make you appear ridiculous in the eyes of your classmates. Show by your actions what you really are. After all they still speak louder than words.

At twenty the road before you seems paved with gold; at thirty it looks rusty; at forty there are no illusions. You see things as they really are, and it's a rude awakening to those who wasted years that should have been spent building for the future. Worth-while chances generally come to youth, but they are, as a rule, not ready for them. When more matured and ready, they are not fitted for them.

Youth and opportunity belong to each other, so why separate them? Grasp every opportunity afforded you in your youth, and as the years advance you will have no cause to regret the many hours spent in preparation for the time when you will be called upon to shoulder life's greater responsibilities.

Eye Eye Suh!

(Reading time 1 min. 30 sec.)

Think of this—54,672,465,803,673,600 different opthalmic lens combinations can be produced. Less than one person in one hundred examined for glasses is found to have an eye disease. At four and one-half years, a baby's eyes are as big as they will ever be.

The N'Yawk Times reported, a few months ago, that a one eyed customer ordered an artificial eye of slightly bloodshot appearance—to match his "morning after" eye.

Optometrists prescribe more than 75% of all the eye-glasses used in the United States.

Of the 3,000,000 (approx.) school children handicapped by defective vision, hyperopia is the most common, astigmatism next and myopia third.

Momentary blindness assails every automobile driver for approximately 120 feet after passing an oncoming machine at night.

Cylindrical and compound lenses were invented by George Aivy, in 1827; but not until 1863 were facilities developed for grinding these lenses in the United States.

In Normal Schools and Colleges, 18.5% wear glasses.

The first pair of spectacles in America was brought over by Peter Brown, a Pilgrim. (So my lens' ancestor came over on the Mayflower, eh?)

One out of five have defective vision and three out of five have some eye-strain.

Reports from schools of the blind show that at least 25% of the children admitted became blind as a result of neglected cases of opthalmia neonatorum. (The irony is that only a few drops of silver nitrate administered at birth would have prevented this disease.)

Physical Education for the Optometry Student

A. E. Bressler, *Assistant Physical Director*
Boston Y. M. C. A.

The objectives of a program of physical education are to promote activities which have health values during the college years, and to make proper provisions for a knowledge and interest in games which have a recreational value. These recreational games will ensure the student against inactivity after he leaves college. A careful survey of these health and recreational objectives must be made in order for them to be of any value to the student.

Health is a term which has been applied to so many programs, both commercial and medicinal, that repetition has brought about a paradox in that the word has lost its emphasis. Health, therefore, must be broken down into its component parts to be of any value to a person interested in physical education. These are physical health, mental health, and social health. Both mental and social health are by-products of physical health will usually ensure good mental and social health. Physical health is a normal function of the organs of the body.

Recreation, a term meaning to recreate, should be the working objective for the maintenance of physical health. The recreational instinct which is a fundamental instinct in every individual, should be appealed to by suitable games within the individual capacity. Stress should be given to the acquiring of skills in natural activities which will tend to raise the level of health and efficiency to a point where the student will go forth from college with a well developed and healthy body. In the past, this objective has been over-looked. Too much emphasis has been placed on the competitive program of physical education. The great majority of students that did not have the ability to compete in the highly trained sports have been forgotten. They have gone through college taking the compulsory gymnasium activities which were usually not to their liking.

In the last few years, the physical educators have realized this need and are now revamping their programs to fit the individual needs of the participants. Physical education, if it is properly administered should be the cornerstone of the curriculum of education. In order to do this the program must be enjoyed by the participants. A program that is compulsory and not enjoyed will not have the carry-over value that is so essential. A correct program should include recreational games of every type. Also, it should include individual work for the development of the fundamental movements and reflexes of the body. Where poor body mechanics accompanies poor muscle tone, emphasis should be given to the development of the organic and skeletal system so that good body mechanics may become possible. A physical education program that does not have this individual work will fail to ensure their students the ability of maintaining good physical health.

Until recently, programs have been promoted with no visible means of measuring the progress of the students, therefore, handicapping the program, and the students. A physical education program should have some means by which to measure the physical ability of every participant. Progressive activity and measurements are so closely interwoven that to separate the two would render one useless and the other purposeless.

There are five specific functions of measurement that are very important to a physical education program. The first function is to secure scores from which accurate comparisons in terms of units of measurement between various bodies, or activities may be made. The second function is to determine the status of bodies or activities

so they may be classified into groups. The third function is to compare the pupil's status on two or more tests to find the progress of the individual. The fourth function is to determine the efficiency and ability of the teacher by comparing his or her results with that of another teacher, or teachers. The last function is to determine the efficiency of the total physical education program. In studying these functions one can see that a program which has no measuring devise will be without purpose.

A measurement program will also ensure protection to the competitive athlete. He will not have the tendency to overtrain if he knows his physical condition from day to day. Also, the good physique of the athlete lends him a false assurance of security. Many athletes in the pink of condition can violate certain health rules and apparently suffer no consequences. However, these habits of carelessness during the competitive season result in the formation of faulty health habits which later become detrimental to the health of the individual. Every college student should be familiar with, and practice the fundamental rules of hygiene and preventative medicine.

In conclusion, the emphasis should be placed on the promotion of a program which suits the needs of all the students. Skill should be taught to those students who, previously, because of their unadaptability to participate in competitive games, have not developed adequate recreational interests. An attempt should also be made to interest students, who have heretofore participated in games which were inadequate for use after leaving college, in games that are adaptable for use in the future years of the student's life.

Pi Omicron Sigma

The biggest turnout of the year took place at the Blue Room of the Hotel Westminster, on Friday night, January 31st, when the students of Massachusetts School of Optometry put forth their best legs, in tuxes, at a dinner-dance given under the auspices of the Pi Omicron Sigma Fraternity. The invasion of the resort took place at 8:30, when Normie Maheu personally led the crowd from the bar to the tables—and back to the bar. The affair under the guiding hands of Chancellor Frank Pitochelli and Guardian-of-the-Wilted-Exchequer Samuel Alperen ran a meteoric course until Mal Hallet and his bunch of wrestlers had to throw out the last couple at, around 2:00 A. M.

Through the din we saw:—

Doctor Green, who was telling the world what he should have asked.

Doctor Cline looking smooth as ever.

Samuel Alperen trying hard to keep his corner on the dance floor.

Pitochelli looking the place over.

Barney Levin squeezing the glasses.

Ken Greene not asking to be slapped.

Bob Low with his queen—

Jerry Lemay looking blasé.

Normie trying to down the 4th—

Pike looking a little riper than last time.

Hal Shepard keeping his tails out of the soup.

In fact, a mob of roisterers kept the room rocking while the silly freshmen giddily watched some seniors make fools of themselves.

The committee of the dance are to be congratulated upon their whole-hearted enthusiasm in bringing about such an enjoyable evening.

Don't You Believe It

by MARK H. BUDILOV

(An extract from
"Anomalies and Curiosities of Medicine"
by Gould & Pyle)

Throughout the ages man's fancy has always been aroused by things unusual and extra-ordinary—things that apparently violated the inexorable law of cause and effect. Men like P. T. Barnum and R. L. Ripley have well understood this universal human craving, and have devoted their entire lives in an effort to satiate it. And newspapers have *always* featured "man-bite-dog" articles.

Gould and Pyle, in their book—"Anomalies and Curiosities of Medicine"—published in the year 1897, include a number of cases which should bear especial interest to us, cases of anomalous conditions of the eye and its appendages. We must bear in mind, however, that most of this material was collected from the medical records of the 19th century and back as far as the days of Galen, Vesalius, Da Vinci, Harvey and other makers of medical history. In those days the scientific method of research was not nearly so well developed as it is today, and the store of scientific knowledge was, of course, very limited. For this reason, and perhaps because some of those ancient investigators might have recorded what they would have liked to see rather than what they actually did see, the value of some of the following cases lies in their humor and not their authenticity.

A good example is the case of "The Four-eyed Man of Cricklade", a celebrated English monstrosity of whom little reliable information is obtainable. He was visited by a Mr. W. Drury, who was accredited with the following report: "So wondrous a thing, such a 'lusus naturae', such a scorn and spite of nature I have never seen. This unfortunate had four eyes placed in pairs, one above the other and all four a dull brown encircled with red, and pupils enormously large. Vision in each organ was perfect. He could shut any one of the four, the other three remaining open, or, indeed, as many as he chose—each eye seeming to be controlled by his will and acting independently of the rest. He could revolve each eye separately in its orbit—looking backward with one eye, forward with another, upward with one, and downward with the other. He was of a savage, malignant disposition, delighting in ugly tricks, teasing children, torturing helpless animals, uttering profane and blasphemous words, and acting altogether like the monster, mental and physical, that he was".

An especially strange and rare anomaly that has been reported several times is the partial or complete absence of the eyes. Wordsworth described a case of a baby of seven weeks, otherwise well-formed and healthy, in which there was a congenital absence of both eyes. Its parents were healthy and normal. In some instances of supposed absence of the eye-ball, the eye was present, but was diminutive and situated in the posterior portion of the eye-ball. Cases have been reported in which there was a single orbit with no eyes, and in which there was a single orbit with *two* eyes. Mackenzie wrote of cases in which the orbit was more or less completely wanting and there was a mass of cellular tissue in each eye.

Albinus told of an instance in which he found extra-oral dentition in the orbit (and nose). Cases have been described of monstrosities with closed eye-lids, adherent eye-lids, and of congenital paralysis of the Levator Palpebrae Superioris muscle in a child with perfect vision and health.

Cyclopic monsters have been reported several times. Vallentini, in 1884, reported one such case in which the infant lived 73 hours. It had one eye in the center of its forehead. The American Medical Review in 1895 contained a report of a child born in

Paris with its eyes on the top of its head. It seemed to be doing well and was a great attraction at the time. In Portland, Oregon there was a child born with a rudimentary eye between two normal eyes.

DuBois made mention in his memoirs of a case of supernumerary eye-lids. At the exterior angle of the eye-lid there was a fold of conjunctiva which extended .5 cm. in front of the conjunctiva, to which it did not adhere, therefore constituting an extra eye-lid.

Dixon came across a very odd case of a total absence of both irides in an 18 year old man, and also in a 37 year old woman. The latter had excellent vision. Another interesting case was that described by Jeaffreson. He found a woman in India in whom there was a complete ossification of the iris. It was immovable and quite beautiful when seen through the transparent cornea. Her vision was but slightly impaired.

Supernumerary pupils have been seen more than once. Higgins, in 1885, examined a boy whose right iris was perforated by four pupils. Three were slit-shaped, and the fourth, which was the largest, had the appearance as of the separation of the iris from its insertion. In the left iris were two pupils, one slit-shaped and the other resembling the fourth in the right iris. The fundus could be seen clearly with an opthalmoscope. The boy had a high myopic error. His affliction was evidently congenital. There were no traces of a central pupil or of past iritis.

A double crystalline lens was reported by Fritsch and Valisneri, and more modern references to it have been made. Clark discovered in one individual a congenital dislocation of both lenses, which moved freely through the pupil into the anterior chamber.

Differently colored irides have often been found. Anastasius I., emporer of the Orient, had one black and one blue iris, for which reason he was called "Dicore".

Senior Scriblets

In response to Dr. Green's promise of fame to anyone who devises a method for accurately measuring blurs, Fuzzy Weinberg offers, "The fifth glass of beer usually produces the first blur, while I get diplopia after the tenth. Recovery occurs when Singer offers to pay the bill."—That last sounds like a shock duction.

They say the difference between an insane man and a sane one is that the queer one thinks he is what he isn't while the normal one thinks he isn't what he is. What do you think?

PARLOR SCENE:—

Semi-darkness...Moonlight streams thru windows...Faint strains of rapturous melody...Two figures huddled in close proximity on sofa,—friend Morally and his fair one...The maid speaks, softly, alluringly, "Now, now, Eddie, I see the lovelight in your eye."...Our hero replies, "You're wrong dear, this is my scope and I think you've got a negative lag."

A Lyrical Exam—

A Little Bit Independent—Patient.
Eeeny Meeny Miney Mo—Age.
Dancing with Tears in My Eyes—Complaints.
I've Got a Feelin' You're Foolin'—Naked vision.
Cheek to cheek—Ophthalmoscopy.
Anything Can Happen—Keratometer.
Keep Your Fingers Crossed—Static-ski.
Lost in A Fog—Subjective.
Don't Give Up the Ship—Dynamic.
Double Trouble—Phoria.
You Let Me Down—Cross cylinders.
You Hit the Spot—Stereo-campimeter.
I'm On a See-saw—Diagnosis.
You Can Count on Me—Advice to patient.

Let's See

WILLARD W. THOMPSON
126 Newbury Street, Boston, Mass.
January 8, 1936

We have often stood on the brow of a hill and looked out over the valley at the scene before us. How we have marvelled at the wonders of nature— the beauty of the colorful foliage, the river winding its way down the valley, and the distant landscape! This picture and the smile of our loved ones are all made possible to us through our most precious possession—our EYES.

The human eyes were evolved for use in these outdoors where nature provided plenty of good quality light from the sky. Nature protected our eyes from glare in our surroundings— the trees, vegetation in general green, the blue sky, the dark colored mountains, weathered rocks.

Present day civilization does not protect our eyes from hazards as nature does. Close work for the masses is of comparative recent origin and easily controlled artificial illumination is new. The human eye during this short evolution period cannot accommodate itself to these new conditions. The result is eye-strain, causing waste of human energy and very often unnecessary waste in the commercial world.

The human seeing machine is interested in:

The eyes or ocular senses
Visual task
Light and lighting
Surroundings

The ocular receptacle if incorrect can be corrected or materially helped in its functions by the Optometrist. It is his special work, but he should not stop there. He should give consideration to other factors that will increase his value to his patients. He should perscribe the quantity and quality of light for each patient. He has examined the eye and knows the defects or conditions of the eye. This knowledge can be used to determine for the patient the lighting requirements for eye comfort. Eye conservation through better light opens up a new field for the Optometrist, and will be to the Optometrist what preventive medicine is to the medical profession. For prescribing, the Optometrist should have a unit that will vary the intensity on the task without any change in color temperature, a Photronic Cell light meter for measuring light values in footcandles, and a set of vocation tasks.

The visual tasks usually are beyond our personal control. We can select them, but we cannot select the size type we would like in a book or newspaper. Unfortunately, consideration in the relationship of the task to visibility is often overlooked.

Light is essential to seeing, and is invisible until it strikes an object, being reflected from the object to the eye. Light is controllable and is of primary importance as a tool for decreasing the burden our civilization has placed upon our visual sense.

The surroundings—if dirty and unpleasant, dark and gloomy—cause us to be depressed, and slow down our visual sense. Instead, there should be light, cheery decoration that harmonizes and is pleasing to the eye, making for visual efficiency.

Much has been written of recent years about the cooperation of the Optometrist with the Illuminating Engineer. New opportunities are presenting themselves to the Optometrists to render a greater service to Mankind in prescribing light for their patients. Let us trim our lamps, and review the practical application of these fundamentals, so that with this knowledge the Optometrist can render a better service for Our Eyes.

We have said the eye was evolved for outdoor use, so it seems only reasonable that interior lighting should strive to give the human seeing machine the same type of light that has caused its evolution to its pre-

sent form. Interior illumination should consist of general illumination of non-glare type plus non-glare local illumination for the visual task of fine detail or of poor contrast.

The eye is very versatile in the quantity of light it requires. Outdoors in the shade there may be as high as 1000 footcandles, and yet we can see objects in the moonlight. Lighting intensities indoors must be classified according to the difficulty of the visual task, taking into account reflected factors of the task. Whenever footcandle recommendations are used, it should be understood that reflection factors are taken into consideration. For instance, for prolonged tasks in the office or factory, 20 to 50 footcandles are recommended, but for the tasks of poor contrast, such as sewing on dark cloth, fine engraving, the recommendations should be based on 100 footcandles or more.

When it comes to quality of light, the eye is not so versatile, and, furthermore, lack of quality is much more energy-consuming than wide variation of quantity. Quality means lack of glare, proper balance between general and local illumination, and the spectral quality approximating daylight as near as is practicable.

Glare or brightness contrasts may be of the direct type, such as from a bare bulb, bright light source, or of the indirect type such as glossy paper or glass top desks. Glare has proven to have caused nervous muscular tension and may cause deep-seated detrimental effects. A glary source of light, such as from a bare bulb, at 20 degrees from the line of vision, will waste 80% of the illumination that is supplied on the task.

Glare is an unnecessary by-product of poor lighting. It may be defined as any brightness which we see and which is of such a character as to cause annoyance, discomfort, interference with vision. It may be termed "light out of place". Bare bulbs and glary lights are hazardous to eyes and positively wasteful, because they reduce visibility.

The surroundings, such as the walls and ceilings, control the amount of light reflected to the seeing tasks. Light colored walls and ceilings not only make a room look brighter, but it is brighter. The following table shows the light reflecting values of the various colors:

White (New)	82% - 89%
Cream	62% - 80%
Ivory	73% - 78%
Green	48% - 75%
Yellow	61% - 75%
Buff	49% - 66%
Blue	34% - 61%
Pink	36% - 61%
Gray	17% - 63%
Tan (Dark)	30% - 56%
Red (Dark)	13% - 30%
Green (Dark)	11% - 25%

The control of daylight is often faulty. Windows are sometimes uncomfortably bright or glary, and the variation of intensity between the windows and the walls is excessive. This should be controlled by Venetian Blinds which subdue the daylight brightness or contrast, and redirect the light to the ceiling, giving soft illumination over the room.

There are eight factors to be considered in the practical application of illumination: 1. Quantity; 2. Direction; 3. Glare; 4. Glary reflections; 5. Diffusion; 6. Shadows; 7. Contrast with surroundings; 8. Feeling or tone of surroundings.

1. Sufficient quantity of light to meet the needs of the particular task based on the contrast of the task must be provided, as this has an influence on the speed and accuracy in performing the task.

2. The direction of the light on the task must be considered, for in some tasks it is necessary to have depth in order to get sufficient contrast to see the object.

3. There must be no extreme brightness, such as from the bare bulb. All bare bulbs should be concealed from the line of vision.

4. Polished surfaces should be eliminated to prevent glary reflections. Glass top desks, or the polished surfaces of paper or typewriter are the common causes of glary re-

flections that can be deleted.

5. The light should be properly diffused. In other words, either a diffusing glass should cover the light source, and be of such an area that the brightness of the glass is of a low intensity value, or the light source should be reflected against a large area, such as the ceiling of a room, to give proper diffusion. The quality on the task should approximate daylight in color value as near as is practicable.

6. Shadows should be such that they do not obscure the vision. All the details of the visual tasks should be visible to the eye.

7. The contrast with the surroundings of the light source should be such that no extreme brightness predominates.

8. Surroundings should be such that they are light, cheery and pleasing in tone, making for better physiological feeling and eye efficiency.

Often many compromises are made in respect to good seeing conditions; yet there should be no compromises made with eye sight. All the factors that enter into proper seeing conditions should be given full consideration, or else we unwittingly introduce conditions that may insidiously cause trouble.

Annual Convention

NEW ENGLAND COUNCIL OF OPTOMETRISTS

Hotel Statler, Boston, Mass.

MARCH 22, 23, 24, 25, 1936

TENTATIVE PROGRAM

Sunday Evening, March 22

Demonstration of optical principles involved in cross-cylinder tests and the Ophthalmometer, by Dr. Julius Neumueller, Dr. J. F. Morrow, Jr., and Dr. R. J. Beitel.

Monday, March 23

President's Address.

Dr. Walter I. Brown, President of the A. O. A.

Dr. Laurence P. Folsom, "The Application of Logic to Optometry."

Dr. Theodore Klein, "Optometry the Profession."

Dr. Frederick Booth, "The Development of the Fusion Faculty."

Mr. Earl H. Canfield, "Good Light for Better Sight."

Dr. Max Poser, "The Living Eye Under the Microscope."

Dr. R. J. Beitel, "Psychological Aspects of Subjective Tests."

Tuesday, March 24

Dr. John W. M. Bunker of M. I. T., "Biology of the Eye."

Dr. Morgan Upton of Harvard, "Physiology of Vision."

Dr. Robert C. Givler of Tufts, "Psychology of Vision."

Dr. Samuel Garfin of Harvard, Pathology, "Ocular Manifestations of Systemic Disorders."

Wednesday, March 25

Dr. Louis Jaques, "What's a Fit—How to Make It and How to Sell It."

Dr. Jaques is scheduled for the whole day.

Dr. Fannie Gassett, Chairman of the Ladies Auxiliary, will provide entertainment for the ladies during the entire Convention.

During the entire three days, a clinic will be conducted under the chairmanship of Dr. John Corbett, with three fully equipped clinic rooms and a quota of clinicians who will examine 40 or 50 needy children.

Optometry Club

The Optometry Club has continued its fine work by presenting two interesting lectures to the student body during the last semester.

Dr. Philip G. Quinn, of Fall River, Mass., graciously gave his time and efforts to make the January 8th meeting a huge success. Few lecturers are as well versed in the "Theory and Technique of Cross Cylinders", as this man. A brief outline of the lecture follows:

Part 1:

1. Theory of the Cross-Cylinder.
2. Testing the strength of the correcting cylinder.
3. Cross-Cylinders in Convergence tests.
4. Determining the Presbyopic reading addition.

Part 2: *Cross-Cylinders as used by Peckham.*

1. Finding the Latent Hyperopia.
2. Check Tests with Cross-Cylinders.
3. Measuring Relative Convergence.

Part 3: *Cross-Cylinders as used in the Foundation Clinic.*

1. Unfused Cross-Cylinder Test.
3. Fused Cross-Cylinder Test.

The February 12th meeting was arranged with the American Optical Company, who presented Mr. J. Y. Taylor of the Department of Visual Science. Mr. Taylor discussed Rhythm Reading and the new methods of photographing the visual movements. At the same time he demonstrated the use of the Metron-O-Scope and Ophthalmograph which proved of interest to those students present.

There's Logic in Each Line

"It's easy finding reasons why other folks should be patient."

"Whatever you dislike in another person take care to correct in yourself."

"True politeness is perfect ease and freedom. It simply consists in treating others just as you like to be treated yourself."

"Whatever you do, do wisely and think of the consequences."

"Prescribe to yourself an ideal and act up to it."

"The man who does right need not worry if somebody catches him at it."

"Many people find nothing to do because they neglect opportunities."

"A prudent man is like a pin, his head prevents him from going too far."

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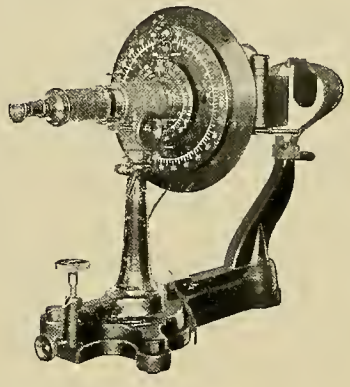

SHURON OPTICAL CO., Inc., GENEVA, N. Y.

Established 1864

Junior Flashes

This division of classes makes it easier for some of us—we don't have to "B" there.

John Di Napoli has discarded his Rx—for a pair of binoculars!

It seems we have a "bald-headed row" in class (Roy, Leavitt, Green, and Smith.)

Huddy appears to be a "Jack-of-all-Trades"—he recently fixed the door in a Theoretic Optometry class while Dr. Green stared in complete amazement.

One of our illustrious Juniors seems to be locomotively inclined. (Letting off steam —sssssssss!).

MacCasson has taken a rise from his ordinary rank and has been promoted to a "Major Domo" Degree. (His chest is so big, he wears a 200 lb. burlap sack for a vest).

Here's Lokitz's idea of a perfect school year:—

Vacation—11 months
Saturdays—15 days
Sundays—15 days

Total—"Cherchez la Femme"

Dedicated to—

"Here's one for you"; when you answer it "you won't have a leg to stand on. Important, too!" (Emphasis with index finger). "Are there any further questions? No questions! I doubt that! What's more, I stressed the point when we first had it." Well—the Providence Limited and Brockton Express have arrived—class resumed.

Basketball Team

Massachusetts School of Optometry at last seems to be represented by a basketball team, which should be recognized in a high position, as an extra-curricular activity at our school. With several games already under their belt the team appears to be going places. Under the leadership of Capt. Smith, and the fine freshman material present here this year, Coach Sol Naiglan of the Burroughs Club, has certainly molded a team which should offer plenty of opposition to the remaining teams on the schedule this season.

The student-body should get out there and stand behind this team, which has a stiff schedule to round out, and needs the support of all.

Dr. Green who has so loyally aided our team when it was good, bad, and indifferent has expressed his assurance that this is probably the best team he has seen at our institution.

They have won three out of four so far and with nine games remaining to be played. Give the club your loyal support, and watch them clean up all opposition.

SCHEDULE—

Jan. 15.	M. S. O. 23	—Chelsea Toreadors 19
Jan. 22.	M. S. O. 18	—Middlesex School of Med. 16
Feb. 4.	M. S. O. 49	—Boston Globe 23
Feb. 5.	M. S. O. 30	—Boston Trojans 38
Feb. 11.	M. S. O.	—Chelsea Collegiates
Feb. 19.	M. S. O.	—B. U. Evening School
Feb. 26.	M. S. O.	—Boston Trojans
Mar. 4.	M. S. O.	—Middlesex School of Med.
Mar. 6.	M. S. O.	—Collegiates
Mar. 11.	M. S. O.	—Toreadors
Mar. 14.	M. S. O.	—Boy's Club (Rox.)
Mar. 18.	M. S. O.	—B. U. Evening School
Mar. 21.	M. S. O.	—West End House

The Team

Smith, Capt., *F.*
Cerrutti, *G.*
Freedman, *G.*
Levandowsky, *F.*
Czelusniak, *C.*
Subs.—Carvin, *F.*
Wise, *G.*
Shack, *C.*
Massucco, *F.*

Bowling Headquarters of the M. S. O.

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ROCHESTER, N. Y.

GRADUATION—THEN WHAT?

RALPH BARSTOW
77 East Boulevard, Rochester, N. Y.
December 19, 1935

The conception that a man is "all educated" when he gets through school is pretty rapidly exploded by things that happen to a man shortly after graduation. Getting a diploma and passing an Examining Board doesn't make a man an optometrist. They are the two necessary preliminary steps, but two more factors are required. He must have patients on which to practice, and he must be a part of the living optometric body or organization. You can't practice optometry in a vacuum, and it's still a partial vacuum when a man gets an office and some patients. It will remain so until he becomes a part—yes, and an active part, of his state and national society, and local study group. It has been I think, a fair complaint on the part of new graduates that men already in practice ignore the newcomer, and yet if you were well established, how would you ever be aware of a recent graduate? In my opinion, optometry belongs to young men but it will not be delivered to them unless they expose themselves amongst their fellow practitioners. I mean by that that your education is not completed, and I hope, never will be completed; but that one part of an education that no school can give you lies in your active contact and association with the men already in practice in your state. To be blunt, I consider it as important to your success that you invest in state and national membership as in your license fee, and you are cheating yourself if you fail to take advantage of your opportunities.

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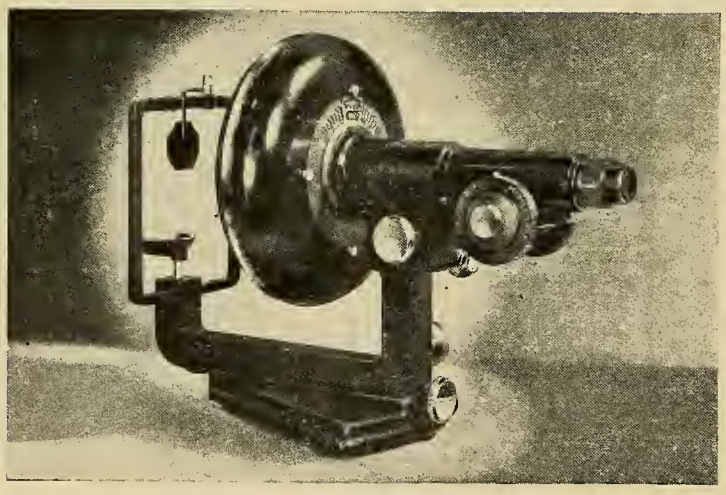

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